

### ABSTRACT OF THE DISCLOSURE

In a network which includes a plurality of nodes with unsynchronized clocks, a message which is used by the destination node to determine the offset of the destination node's clock relative to the source node's clock is sent along a route between the source node and the destination node. At each node along the route it is determined whether the particular node is a slave node with respect to the node which transmitted the message to the particular node or whether the particular node is a slave node with respect to the node to which the message is to be forwarded. If the particular node is a slave node with respect to the node which forwarded the message, the node adds an offset with respect to the master node to the accumulated offset in the message. If the node is a slave node with respect to the node to which the message is to be forwarded, the node subtracts an offset with respect to the master node from the accumulated offset in the message. The result of the additions and subtractions of the offset are included as an accumulated offset in the message and forwarded to the next node in the route. When the message is received by the destination node, the destination node can use the accumulated offsets to determine the relative offset with respect to the source node. The source node and destination node can then exchange time information which is meaningful to both nodes.